5

10

15

20

WHAT IS CLAIMED IS:

1. A method of treating the incineration ash and the wastewater sludge, wherein a mutual relation in using nutrients exists between the incineration ash containing the heavy metal and the organic wastes containing the wastewater sludge and sulfate-reducing bacteria, comprising the steps of:

burying the incineration ash together with the organic wastes under the ground, in which the bacteria reduce the sulfates existing in the incineration ash to form the sulfides;

binding the formed sulfides with the heavy metal to form the insoluble metal sulfides, in order to prevent the heavy metal from exuding out of the incineration ash as the eluate.

- 2. The method for treatment of the incineration ash and the wastewater sludge as claimed in claim 1, characterized in that the said organic wastes comprise the sewage sludge containing the said sulfate-reducing bacteria.
- 3. A method for treatment of the incineration ash and the wastewater sludge, comprising: burying the incineration ash together with the organic wastes containing the sulfate-reducing bacteria under the ground, and covering them with a depth of soil, so that the said sulfate-reducing bacteria promote the heavy metal to precipitate in the form of dissoluble metal sulfides, in order to prevent the heavy metal from exuding out of the incineration ash as the eluate.
- 4. The method for treatment of the incineration ash and the wastewater sludge as claimed in claim 3, characterized in that two or more unit stages of the buried

accumulation, each of which includes the incineration ash and the organic wastes containing the sulfate-reducing bacteria, are constructed in a predetermined pattern of arrangement, and the layer of covering soil forms a barrier which defines the boundary between the said unit stages of the buried accumulation.

5

5. The method for treatment of the incineration ash and the wastewater sludge as claimed in claims 3 or 4, characterized in that the said organic wastes comprise the sewage sludge containing the said sulfate-reducing bacteria.

10

6. A method for treatment of the incineration ash and the wastewater sludge, which comprising the steps:

collecting and mixing the aqueous eluate exuding out of the incineration ash and the aqueous eluate exuding out of the organic waste containing the said sulfate-reducing bacteria in a disposal plant; and

15

reacting both the aqueous elutes so that the said sulfate-reducing bacteria existing in the aqueous eluate exuding out of the organic waste deposits the heavy metals from the aqueous eluate exuding out of the incineration ash as the insoluble metal sulfides, which results in the disposal of the aqueous eluate exuding out of the incineration ash and the aqueous eluate exuding out of the organic waste.

20

7. The method for treatment of the incineration ash and the waste as claimed in claim 6, characterized in that a portion of the precipitated insoluble metal sulfides is extracted from the reaction plant, and only the desired heavy metal is recovered through the further reaction process, in order to reuse the resources.

8. The method for treatment of the incineration ash and the waste as claimed in claim 6, characterized in that the said organic wastes comprise the sewage sludge containing the said sulfate-reducing bacteria.

5